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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,145	03/24/2004	Michael Sonnleitner	1056906	2765

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EXAMINER	
PRICE, CRAIG JAMES	
ART UNIT	**PAPER NUMBER**
3753	

MAIL DATE	DELIVERY MODE
08/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/807,145	SONNLEITNER ET AL.	
	Examiner	Art Unit	
	Craig Price	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,5,11-13 and 26-30* is/are pending in the application.

4a) Of the above claim(s) *2,3,6-10,14 and 15* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,5,11-13 and 26-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 July 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4,5,11,12,and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation in clam 1, lines 13-15, "wherein the piston slides freely from its roll-over position to its normal position regardless of a fluid pressure in the inner chamber when the valve rolls into an upright position", is unclear as to how the piston can slide freely, regardless of a fluid pressure. Please clarify.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,4,5,11,12 and 26-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsudaira et al. (3,288,992).

Regarding claims 1 and 26, Matsudaira et al. disclose the roll-over valve comprising, a valve housing (G, H) having an inner chamber that defines an axis, an inlet opening (60) disposed in a lateral side of the inner chamber (near 70, the inlet 60 intersects with that portion of the inner chamber), and an outlet opening (62) disposed in the valve housing, and a piston (66) slidingly disposed in the inner chamber for movement relative to the valve housing along the axis, the piston having normal and roll-over positions relative to the valve housing, wherein the inlet and outlet openings fluidly connect to each other via the inner chamber when the piston is in the normal position, wherein the piston slides freely from its roll-over position to its normal position regardless of a fluid pressure in the inner chamber when the valve rolls into a upright position, and under the force of gravity into an overturned position, and wherein the piston blocks (as the piston moves to open the plate 74,the piston blocks or impedes the flow of fluid into the inner chamber, as shown in figure 5, the larger end of the piston currently does not affect the outlet flow of 62, as shown by the top portion of the piston being in-line with the bottom of the bore 62, once the valve moves to open the plate 74,then the flow becomes blocked at least partially to some extent, thereby preventing/impeding the flow) at least one of the inlet and outlet openings to prevent fluid flow through the inner chamber when the piston is in its roll-over position as seen in Figure 5.

Regarding claims 4 and 27, Matsudaira et al. disclose that an air-bleed passage (63,65) that fluidly connects portions of the inner chamber that are disposed on opposing axial sides of the piston as seen in Figure 5.

Regarding claim 5, Matsudaira et al. disclose that the air-bleed passage has first and second opposing ends, wherein the first end of the air bleed passage fluidly connects to a bottom axial portion of the inner chamber such that the first end aligns with the axis, and wherein the second end fluidly connects to the outlet opening as shown in figure 5.

Regarding claims 11 and 28, Matsudaira et al. disclose that the inlet opening (60, in the same manner as applicant's) connects to the inner chamber at a position where any pressure that develops in the inlet opening does not urge the piston into the roll-over position as shown in figure 5.

Regarding claims 12 and 29, Matsudaira et al. disclose that the outlet opening is disposed at an upper axial end of the inner chamber as shown in figure 5.

Regarding claim 30, Matsudaira et al. disclose that the sealing surface cooperates with the lateral side of the valve housing by forming therebetween a sufficiently tight clearance to substantially prevent fluid flow therebetween as shown in figure 5 (the gap between the valve and housing is shown to be sufficiently tight in as much as applicant's valve).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsudaira et al. '992.

Matsudaira et al. has disclosed all of the features of the claimed invention although is silent to the valve having an upper portion of the piston as having a frusto-conical surface. Matsudaira et al. depicts a frusto-conical surface (12) in figure 2. I would have been obvious to one of ordinary skill in the art at the time of invention to

employ the upper portion of the piston having a frusto-conical surface from figure 2 into figure 5 of Matsadaira et al. in order to break the plate and open the valve (Col. 2, Lns. 53-58).

Response to Arguments

6. Applicant's arguments filed 22 May 2007 have been fully considered but they are not persuasive.

In regards to your argument concerning that Matsudaira et al. does not disclose "wherein the piston blocks at least one of the inlet and outlet openings to prevent fluid flow through the inner chamber when the piston is in its roll-over position". Matsudaira et al. reference must operate in a manner which blocks/impedes the flow thereby preventing/impeding the flow. As the piston moves to open the plate 74,the piston blocks or impedes the flow of fluid into the inner chamber, as shown in figure 5, the larger end of the piston, in the state shown, does not affect the outlet flow of 62, as shown by the top portion of the piston being in-line with the bottom of the bore 62, once the valve moves to open the plate 74,then the flow becomes blocked at least partially to some extent, thereby preventing/impeding the flow into the inner chamber. Furthermore, the piston can not slide freely as it is stated in the specification that the piston is damped due to the smaller orifice, paragraph 0051 states, "an orifice dampens the movement of the piston 120 relative to the valve housing".

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 7AM - 5:30PM M-R, Increased Flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CP 23 July 2007

GREGORY HUSON
SUPERVISORY PATENT EXAMINER
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